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# INSPECTOR GENERAL for TAX ADMINISTRATION

### DEPARTMENT OF THE TREASURY WASHINGTON, D.C. 20220

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#### MEMORANDUM FOR COMMISSIONER ROSSOTTI

FROM: Pamela J. Gardiner

Deputy Inspector General for Audit

SUBJECT: Final Audit Report - The Internal Revenue Service Needs to

Increase the Capacity, Follow Up on Reported Problems, and Encourage Voluntary Use of the Electronic Federal Tax Payment

Tamela Stardiner

System

This report presents the results of our fourth review of the development and implementation of the Electronic Federal Tax Payment System (EFTPS). EFTPS is a system designed to process electronic tax payment information. We conducted the review to determine whether Internal Revenue Service (IRS) management took effective corrective action on selected, previously reported control and processing weaknesses and developed an effective strategy to increase voluntary EFTPS use.

Information Systems (IS) management corrected several weaknesses reported in prior audits, including revising and retesting the EFTPS Business Resumption Plan for disaster recovery and scheduling programming changes to strengthen controls over simultaneous changes to both the taxpayer identification number and taxpayer name in payment records. However, continued IS management emphasis is still needed in the following areas:

 <u>EFTPS processing capacity</u>: The current system, even with recent modifications to increase the capacity, may not be able to handle the expected volume of electronic payments in 2001. Processing capacity issues have been reported in two prior audit reports.

- <u>Financial Agent (FA) problem solving</u>: Electronic Tax Administration management does not have procedures in place to ensure the FAs properly resolve systemic problems that cause EFTPS errors.
- Small business voluntary EFTPS use: While the number of small businesses who
  voluntarily used EFTPS increased by approximately 50 percent in Fiscal Year 1998
  to 317,000, they still represent only 5.5 percent of the 5.7 million small businesses
  not required to use EFTPS. Prior to our review, IRS management did not have an
  ongoing analysis of voluntary use of EFTPS to identify ways to increase the
  participation of these taxpayers.

We recommended that IRS management determine the expected processing volumes for EFTPS and ensure long-term processing capacity needs will be met as more taxpayers use the system in the future. Also, the FAs should provide IRS and Financial Management System management with documentation of their resolution of reported problems. In addition, IRS management should analyze data on small business voluntary use of EFTPS to focus marketing and communication efforts on increasing the number of voluntary users.

The IRS Chief Information Officer and Chief Operations Officer responded to the recommendations and initiated appropriate corrective actions. Management's response to the findings has been incorporated into the report. In addition, the complete text of the response is presented as an appendix to the report.

Copies of this report are also being sent to IRS managers who are affected by the report recommendations. Please call me at (202) 622-6510 if you have any questions, or your staff may contact Scott E. Wilson, Associate Inspector General for Audit (Information Systems Program) at (202) 622-8510.

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#### **Executive Summary**

The Internal Revenue Service's (IRS) Electronic Federal Tax Payment System (EFTPS) is a system designed to process electronic tax payment information. It receives payment information electronically from two banks, which have been designated as Treasury Financial Agents (FA), and posts the payments to the taxpayers' accounts on the IRS Master Files. During the first nine months of Fiscal Year 1998, almost 34 million payments (totaling about \$859 billion) had been submitted and processed through EFTPS.

This audit is the fourth in a series of development and implementation reviews of EFTPS. In this audit, we reviewed EFTPS controls and procedures to determine whether IRS management took effective corrective action on selected, previously reported control and processing weaknesses and developed an effective strategy to increase the number of taxpayers who voluntarily pay taxes through EFTPS.

#### Results

Information Systems (IS) management corrected several weaknesses reported in previous EFTPS audits, including revising and retesting the EFTPS Business Resumption Plan for disaster recovery and scheduling programming changes to strengthen controls over sensitive payment record changes (i.e., taxpayer name and identification number changes). Continued management emphasis is still needed in the following areas:

- EFTPS processing capacity may not be sufficient to handle the anticipated growth in electronic payments in the future. This issue was reported in two previous audit reports.
- Electronic Tax Administration (ETA) management does not have a process to ensure EFTPS problems reported by the FAs are resolved.
- The IRS can increase the number of small businesses who voluntarily use EFTPS.

#### Electronic Federal Tax Payment System Processing Capacity May Not Be Sufficient to Handle the Anticipated Growth in Electronic Payments in the Future

To address previously reported issues, IS management planned to implement a redesigned process that should mitigate short-term processing capacity risks. However, the IRS business process owners have not developed peak volume estimates to account

for both the growth of current EFTPS use and new electronic payment initiatives that will increase the payment volume through EFTPS. The current system was sized to process the expected volume of Federal Tax Deposits (FTD). FTDs are primarily employers' payments to the IRS for the Social Security, Medicare, and federal income taxes they withhold from employees' wages. Although FTDs should remain the largest segment of EFTPS use, new electronic payment applications, along with increased marketing to potential users, could substantially add to EFTPS volumes.

#### Electronic Tax Administration Management Does Not Have a Process to Ensure Electronic Federal Tax Payment System Problems Reported by the Financial Agents Are Resolved

Currently, there are no procedures in place to ensure that problems reported by the FAs are corrected. Two-thirds (82 of 124) of the incident reports reviewed showed that the problems were caused by programming errors, control weaknesses, or continuing system problems. Many of these reports acknowledged that problems were recurring, but did not address how they would be corrected. The reported problems caused some taxpayers to initiate their payments late and delayed others' receipt of their payment acknowledgements.

#### The Internal Revenue Service Can Increase the Number of Small Businesses Who Voluntarily Use the Electronic Federal Tax Payment System

IRS business taxpayer records indicate that approximately 5.7 million small business taxpayers are not required to pay taxes electronically. Increasing voluntary EFTPS participation by these taxpayers is necessary for the IRS to achieve the legislated goal to process 80 percent of all returns and payments electronically by 2007. To facilitate this effort, we provided ETA management with information about voluntary EFTPS use, by geographic area.

#### **Summary of Recommendations**

The following summarizes the specific recommendations contained in the report.

- Develop estimates for the anticipated volume of payments resulting from the future growth of EFTPS and identify short-term and long-term efforts that will ensure the system can handle the increased volume of payments.
- Require the FAs to submit documentation showing how reported problems were resolved and follow up on items that have not been completed.

• Analyze data on small business voluntary use of EFTPS and use the results to focus marketing and communication efforts on potential users.

<u>Management's Response</u>: IRS management responded to each of these recommendations, stating they:

- Will initiate appropriate actions to ensure the system can handle the expected volume of payments.
- Will improve procedures to identify and monitor trends and actions taken to resolve problems.
- Initiated actions to develop additional marketing and communication strategies directed towards voluntary users.

Management's complete response, including a subsequent addendum, is included in Appendix V.

#### **Objectives and Scope**

We reviewed IRS management's correction of previously reported weaknesses and their strategy to increase voluntary EFTPS use.

The overall objective of our review was to determine whether Internal Revenue Service (IRS) management (1) took effective corrective action on selected previously reported control and processing weaknesses, and (2) developed an effective strategy to increase voluntary Electronic Federal Tax Payment System (EFTPS) use. In addition, we evaluated procedures for ensuring that EFTPS problems reported by the two EFTPS Financial Agents (FA) had been resolved properly.

We conducted audit work between August 1997 and September 1998 in the National Office and at the co-located Memphis Service Center (MSC) and Tennessee Computing Center (TCC). We received IRS management's response in January 1999; however, the response had a disagreement with one recommendation. We worked with the responsible IRS executive to resolve the disagreement and received an amended response in March 1999. The MSC/TCC is the only EFTPS processing location. The audit was performed in accordance with *Government Auditing Standards*.

Details of our audit objectives, scope, and methodology are presented in Appendix I. Major contributors to this report are listed in Appendix II.

#### **Background**

EFTPS is the IRS computer system that processes electronic tax payment information. The majority of electronic payments are Federal Tax Deposits (FTD), although EFTPS can process all types of business and individual tax payments. FTDs are primarily employers' payments to the IRS for the Social Security, Medicare, and federal income taxes they

withhold from employees' wages. The Treasury Financial Management Service (FMS) signed Financial Agency agreements with two banks to receive and validate all electronic payments nationwide for the IRS. EFTPS receives electronic payment information from the two FAs, updates the IRS' accounting records and posts the payments to the taxpayers' tax accounts.

IRS management transferred primary EFTPS business process ownership to the Office of Electronic Tax Administration (ETA) in May 1998. This move brought EFTPS into the IRS electronic filing strategy.

Since January 1996, over 1,800 of the nation's largest business taxpayers have been required to make electronic deposits and payments using EFTPS. The IRS penalizes these large business taxpayers if they do not comply with the EFTPS regulations. Small businesses, even those required to make their payments through EFTPS, are not penalized for not using EFTPS.

By January 1998, approximately 1.4 million business taxpayers were required to use EFTPS. Through mid-June 1998, over 1.3 million (about 95 percent) of these taxpayers had enrolled. In addition, almost 600,000 small business taxpayers and 800 individual taxpayers not required to use EFTPS had enrolled. Through the first nine months of Fiscal Year (FY) 1998, almost 34 million payments (totaling about \$859 billion) had been submitted and processed through EFTPS.

<sup>&</sup>lt;sup>1</sup> The law and regulations that require certain business taxpayers to make all tax deposits and payments through EFTPS also provides for a 10 percent penalty for each payment not made through EFTPS. Since January 1997, the previous and current Commissioners have waived the penalty for all but the largest businesses to allow taxpayers to become acquainted with the process.

#### Results

Our follow-up tests on selected, previously reported issues identified a repeat issue that needs additional management action.

Information Systems (IS) management effectively corrected other follow-up issues identified during our review. These included revising and retesting the EFTPS Business Resumption Plan (BRP) for disaster recovery and scheduling programming changes to strengthen controls over simultaneous changes to the taxpayer identification number and taxpayer name in payment records.

The review identified the following areas that warrant management corrective actions:

- EFTPS processing capacity may not be sufficient to handle the anticipated growth in electronic payments in the future.
- ETA management does not have a process to ensure EFTPS problems reported by the FAs are resolved.
- The IRS can increase the number of small businesses who voluntarily use EFTPS.

Electronic Federal Tax Payment System
Processing Capacity May Not Be Sufficient to
Handle the Anticipated Growth in Electronic
Payments in the Future

In two previous reviews (*Review of the EFTPS* (*Version 1.5*) *Testing, Security and Business Issues*, Report No. 071207 and *Review of the Service's EFTPS Implementation and Enhancements*, Report No. 083008), we reported concerns about the computer system's ability to process expected payment volumes. In response to the most recent recommendations, IS management initiated computer hardware and software improvements which significantly increased performance of the current system. These actions

should mitigate the computer processing capacity risk for the immediate future. IS management also initiated an engineering analysis to determine the best long-term course for increasing processing capacity. This analysis has not been completed. While these actions were appropriate, they did not ensure that EFTPS capacity will be sufficient to timely process future peak day volumes.

Peak volume estimates are needed to support the business requirements for new EFTPS initiatives. The IRS business process owners have not developed peak volume estimates for new initiatives. These estimates are needed to enable IS management to plan an efficient system design and to ensure there is sufficient processing capacity. The current system was sized to process the expected volume of FTDs. While FTDs should remain the largest segment of EFTPS use, planned new electronic payment initiatives and marketing efforts to non-users could significantly increase the volume of payments received for processing through EFTPS.

ETA, the primary business process owner, has initiated the development of additional payment initiatives that will increase future volumes. New initiatives include:

- Credit card payments.
- Electronic funds transfer (EFT) payments associated with electronically filed balance due returns.
- Federal Payments Levy (to process delinquent taxes collected by levying federal benefit and vendor payments).
- Marketing efforts focused on improving required users' compliance and increasing the number of voluntary users.

The IRS follows the Systems Life Cycle process when developing or enhancing its computer systems. This process is designed to facilitate the proper development and testing of new systems. A key step in this process is to define the system requirements, including defining

what the computer application should do, and assessing the technical needs (cost and schedule estimates) and architectural (e.g., computer hardware configuration) impact of the application.

At the time we completed our fieldwork, the IRS business process owners had not provided peak volume estimates for the various initiatives planned for EFTPS. IRS Collection management was working with FMS and the General Accounting Office (GAO) to develop estimates for the Federal Payments Levy application, currently scheduled for implementation in June 2000.

ETA provided IS management with annual volume estimates for all the current and planned payment options through 2002. In addition, Forms and Submission Processing management drafted annual volume estimates for all payment processes, including EFTPS (Cash Management Payment Plan). However, annual volume estimates are not readily translated to daily processing capacity needs. Also, the ETA and Submission Processing estimates were not consistent, providing significantly different projections. For example, Submission Processing estimated 16,000 electronic payments on U.S. Individual Income Tax Returns (Form 1040) in 1999, whereas ETA estimated about 2 million electronic payments on the same returns. Submission Processing and ETA management plan to resolve the electronic payment volume estimates.

Even with planned improvements, the IRS still faces a risk that peak payment volumes in 2001 could exceed the EFTPS daily processing capacity. Insufficient processing capacity could result in untimely taxpayer account updates.

## Even without considering new payment initiatives in our estimate, the current system may not perform at a level that will ensure timely processing in the long-term

We estimated that the IRS could receive about 4.6 million EFTPS payments on October 31, 2001. This volume was based on the assumption that the current users of EFTPS would continue to use the system. The peak day estimates are based on an analysis of:

- Annual electronic payment volumes for 1998 through 2002, as shown in the draft *Cash Management Payment Plan*.
- Payment deposit and return due dates.
- Current EFTPS payment patterns.

In response to previous audit recommendations about system capacity and an IRS Capacity Management Branch report, IS management planned to implement a redesigned EFTPS computer application, which should mitigate an immediate processing capacity risk. Capacity Management Branch projected that, with this change, the current system would be able to process over three million electronic payments in a day. However, this would still not be sufficient to handle the potential 4.6 million EFTPS payments that we estimate could be received in one day in 2001.

Identifying alternate operating plans could further postpone the risk.

### Alternate operating plans could further postpone the processing capacity risk without significant additional investment

EFTPS and IRS taxpayer account processing are conducted as batch processes. The EFTPS process is coordinated with the weekly Martinsburg Computing Center (MCC) taxpayer account processing. Currently, EFTPS operations are considered timely if the daily processing cycle is completed within 24 hours, and all processed records are transmitted to MCC within the appropriate weekly processing cycle. All EFTPS processing is conducted at the TCC.

MSC, TCC, and EFTPS Project Office personnel indicated that alternate operating plans could ensure timely processing of peak day processing volumes. Our estimates show that, if an alternate plan were implemented properly, peak volumes that exceed EFTPS' daily processing capacity should be relatively rare. The alternatives being considered include:

- Extend a peak volume processing day's completion into the next day, thus delaying the second day's processing start-up. This could be acceptable in mid-week, if the peak day is followed by an average or below average volume day. EFTPS processing reports indicate that peak volume days have usually been followed by below average days.
- Schedule extra processing days or delay the last day in a weekly cycle to process overflow volumes.
   Similar to extending a processing day in mid-week, this option would have to be coordinated with the MCC.
- Process the payment receipts from the two FAs at different sites or on different days:
  - 1. Route one FA's volume to the TCC and the other FA's volume to the Atlanta Service Center (ATSC). The ATSC has an existing electronic payment system normally used for program development and is available for disaster recovery.
  - 2. Process one FA's volume one day, and the other FA's the next day.

Either approach would take advance planning and coordination among the FAs, the TCC, the ATSC, and the respective IRS accounting functions so that the payment volumes would be processed timely and accounting records would be complete.

### <u>Insufficient processing capacity could result in</u> untimely taxpayer account updates

If EFTPS does not timely process payments on balance due accounts, the IRS may erroneously send notices to taxpayers. To prevent this, the IRS needs to develop alternative plans for handling the excess volume of payments.

Currently, balance due payments are a small portion of the total payments processed by EFTPS. However, the

To avoid long-term processing capacity risks, the IRS' ongoing engineering analysis is needed to identify the necessary EFTPS system modifications.

We recommend development of peak volume estimates, alternative operations plans, and continued long-term reengineering to mitigate the processing capacity risk. amounts of these payments can be very large. For example, on two peak volume days (April 15, 1998, and April 30, 1998), 6,905 of approximately 1.2 million payments were for balance due accounts. The payments on these balance due accounts totaled over \$276 million.

For the long-term, the IRS' ongoing engineering analysis should identify changes needed to overcome future processing capacity risks. As previously noted, the EFTPS Project Office requested an engineering analysis of the current system architecture. This analysis will aid management in determining how the system needs to be redesigned to eliminate long-term risks. Estimates of overall and peak EFTPS payment volumes planned for the future are needed as input for the engineering analysis. Realistic estimates will enable the IRS Architecture, Engineering and Infrastructure personnel to properly size EFTPS capacity requirements and determine the appropriate future system design and architecture.

#### Recommendations

- 1. IRS management should document overall and peak volume estimates and timelines for each payment option to project expected EFTPS volume growth.
  - a. IRS business process owners should immediately develop these estimates for all production and in-development computer applications, and develop estimates for future applications as early as possible in the Requirements Management process. IRS management should also develop a process to ensure these estimates are updated based on actual accomplishments.
  - b. IS management should consolidate these estimates to determine long-term expected EFTPS processing volumes and peaks.

- 2. IRS management should take the following additional actions to ensure EFTPS processing capacity is sufficient to handle the anticipated growth in electronic payments in the future:
  - a. Supplement the improved processing design with operating plan alternatives that use the TCC and ATSC systems and the MSC Accounting capabilities to ensure peak payment volumes are processed within the appropriate processing cycle.
  - b. Complete the ongoing engineering analysis and then implement the recommended design and architecture changes, as needed.

#### Management's Response:

ETA management will develop peak volume estimates for new electronic payment initiatives. They will evaluate the impact of the EFTPS avoidance penalty, new payment initiatives implemented in 1999, MSC daily processing volumes, and quarterly Usage Report data. ETA management will consolidate the estimates to determine long-term estimated processing volumes and peaks. ETA management also reviewed the alternative plans and determined that the optimum solution is to extend a day's processing into the following day.

EFTPS developers redesigned the EFTPS application to improve processing times in Version 4.0, implemented January 1, 1999. IS Capacity Management Branch recommended the redesign in its EFTPS Capacity and Performance Study Report, dated July 20, 1998. The redesign brought peak processing capability to at least three million transactions per day, which should support the business needs for the foreseeable future.

IS Capacity Management will continue to monitor TCC EFTPS performance throughout 1999, by way of an automated data collection agent. IS expects ETA to provide peak volume estimates in January 2000. Capacity Management will model and analyze these

peak volume estimates, along with collected system data, to provide a formal written assessment of EFTPS processing.

#### Electronic Tax Administration Management Does Not Have a Process to Ensure Electronic Federal Tax Payment System Problems Reported by the Financial Agents Are Resolved

The IRS is at risk of having adverse problems continue if a procedure is not put into place to ensure that problems reported by the FAs are corrected.

The FAs use incident reports to document FA processing system and customer service interruptions and delays when they occur. These reports analyze the potential impact of the problems, briefly describe how the problems will be resolved, and sometimes provide updates on the resolution. The FAs provide the reports to both the IRS and FMS.

We reviewed 124 incident reports prepared by both FAs during the period August 1997 to June 1998. Two-thirds (82 of 124) of the reported incidents were caused by problems with the way the system was designed or programmed. Correcting these problems would require redesigning or reprogramming by the FAs. The remaining 42 incidents were the result of other problems, such as human error or unexpected computer failures.

#### <u>Taxpayers were affected on many occasions when FA</u> service was delayed or interrupted

Based on the review of incidents reported between August 1997 and June 1998:

- In one incident, 48 taxpayers' payments were input one day late because the FA's system problems prevented the taxpayers from completing their payments timely.
- In two other incidents, the FA did not transmit all Electronic Tax Application (Same-Day) payments to

the IRS.<sup>2</sup> Five payments, totaling approximately \$987,000, were not included in the payment detail files or in the related deposit batch totals sent to IRS, and thus were not timely processed or identified by IRS accounting controls.

 Other incident reports indicated that recurring problems caused 67 payroll accounting service providers (transmitting files containing over 7,300 payments) and over 37,000 taxpayers making payments, to make additional telephone calls to transmit their file or complete their payment, respectively.

When system breakdowns prevented taxpayers from completing payments, the FAs provided IRS management with lists identifying the taxpayers that were connected to the FA at the time of the failure. If the taxpayers' payments were late and they were penalized, the lists established "reasonable cause" and late penalties could be reversed.

However, these types of incidents contradict EFTPS marketing, which asserts that EFTPS is easy to use and accurate. While these types of problems are relatively rare in relation to the total number of EFTPS transactions handled, the affected taxpayers and service providers had to make additional telephone calls to the FAs and/or the IRS to input or verify payments.

The FAs' Quality Measures reports track critical system outages and the customer service impact of the various problems. For example, when FA system problems affect a significant number of taxpayers, the taxpayers' inability to complete payments may be reflected in the

<sup>&</sup>lt;sup>2</sup> Electronic Tax Application (Same-Day) is a payment option provided by the Federal Reserve System that permits a taxpayer to initiate a timely payment on the due date. Other payment methods require at least one business day lead-time to initiate and settle the payment.

reports as increased customer service volumes, increased call wait times, and abandoned calls.

### IRS management should ensure that the FAs' systems will reliably, timely, and accurately process payments

Both IRS and FMS management periodically review and discuss EFTPS performance with the FAs. IRS and FMS concerns about recurring problems identified in the incident reports were communicated to FA management. However, despite communication efforts, FMS management determined that recurring problems continued and, on March 27, 1998, they issued a Performance Letter to each FA addressing reported incidents and performance measures from the previous three months. Each FA was asked to respond with an analysis of the problems and proposed solutions. One FA responded verbally, the other in writing; however, the responses were not sufficient because they did not document the development of the solutions and testing of the changes.

### Management does not have a continuous process to ensure computer programming changes are appropriately and timely implemented

These changes include solutions to problems identified in incident reports. Currently, the FAs are not required to provide the IRS and FMS with documentation that computer programs were changed on their systems. Effective change controls should require that any time the FAs modify their computer application software, they will provide the IRS and FMS with documentation of their changes. The documentation should include FA management's approvals to design and develop the necessary changes, approvals of change test results, and authorization to install changes. IRS management, through the Requirements Change Notice (RCN) process, can require this new FA procedure. The RCN process is the procedure established to notify the FAs when either IRS or FMS requires computer

programming or procedure changes that are related to EFTPS.

This becomes an even more important issue in light of a problem with one of the FA's processes recently reported by GAO. GAO reviewed the general information system security controls at the FA sites, and identified missing or inconsistently used software change controls. GAO reported its results to FMS for corrective actions.

#### Recommendation

We recommend that IRS and FMS management establish procedures to monitor the FAs' planned corrective actions on reported problems.

- 3. IRS management should recommend, through the RCN process, improved incident report procedures.
  - a. The FAs should provide IRS and FMS management with documentation of their resolution of reported incidents, including evidence that computer-programming changes are properly documented, tested, and approved before implementation.
  - b. IRS management should include, in the current oversight process, procedures to monitor FA proposed corrective actions and to follow up with the FAs on incomplete actions and recurring problems.

#### Management's Response:

ETA management will prepare a RCN to require the FAs to provide IRS and FMS management with all program transmittals related to the resolution of reported incidents. IRS management will also continue to monitor Incident Reports, monthly status reports, and Quality Measures reports to identify trends and the actions taken to resolve problems.

The Internal Revenue Service Can Increase the Number of Small Businesses Who Voluntarily

### Use the Electronic Federal Tax Payment System

In a previous review (*Review of the Service's EFTPS Implementation and Enhancements*, Report No. 083008), we reported on management's efforts to enroll the 1.4 million larger business taxpayers that are required to use EFTPS. We reported that their efforts to communicate and educate taxpayers that are required to use EFTPS were largely effective. Through mid-June 1998, about 95 percent of these taxpayers had enrolled to use the system.

In our current review, we found that IRS management continued their emphasis on enrolling taxpayers required to use EFTPS. However, expansion of the mandated population will be effectively capped because the current regulation that requires mandatory EFTPS use does not permit IRS to continue the business taxpayer account analysis after 1999.

Only since May 1998, when business process ownership was transferred to ETA, has IRS management focused efforts on increasing voluntary use.

- The IRS' ETA strategy for increasing electronic filing by all taxpayers indicates that integrating electronic payment with electronic return filing is a priority. To increase electronic payments, the strategy identifies marketing efforts to increase voluntary growth and new payment options, such as home banking and credit cards.
- ETA requested the development of an EFTPS application to process an EFT payment received with an electronically filed balance due tax return.
- ETA initiated development of two credit card payment options to be piloted in 1999 for Form 1040 balance due returns. They selected a vendor, began discussions with internal and external partners to

IRS management placed an emphasis on increasing voluntary EFTPS use after ETA became the business process owner in May 1998.

develop the applications, and publicly announced the options to generate taxpayer interest and future use.

### The potential for voluntary electronic payment use is <u>tremendous</u>

Increasing voluntary EFTPS participation by small business taxpayers is necessary for the IRS to achieve the legislated goal to process 80 percent of all returns and information documents electronically by 2007. Analysis of IRS business taxpayer accounts identified about 5.7 million small business taxpayers not required to use EFTPS. IRS management estimated that small business taxpayers who are not required to make electronic payments will send the IRS an average of 112.4 million paper checks, FTD coupons, and magnetic tape records that accompany payments each year during the five-year period, 1998 through 2002. These 112.4 million payments from small businesses will represent about half of the total volume of payments that the IRS expects to process each year. Processing checks, coupons and magnetic tapes is labor intensive and error prone.

The FAs reported that voluntary EFTPS use increased from 214,000 taxpayers in October 1997 to almost 317,000 taxpayers in mid-June 1998 (a 50 percent growth). However, the 317,000 represents only 5.5 percent of the 5.7 million small business taxpayers not required to use EFTPS. As of mid-June 1998, 131,000 taxpayers either individually chose to use EFTPS, or are clients of small service providers (Batch Filers) who chose to use EFTPS for their clients. For purposes of our analysis, this group represents the population of potential small business voluntary users. The remaining 186,000 of the voluntary users were clients of large payroll service providers who transact payroll deposits and payments for their clients. Several of these large service providers adopted EFTPS as their preferred means of making payments since they could do so electronically using bulk processing.

We provided IRS management with an analysis of voluntary EFTPS use that indicated the areas of the country where EFTPS has been more accepted.

The potential for voluntary EFTPS use is significant. Electronic payments made by small businesses equaled less than one percent of the average number of paper and magnetic tape business payments expected during the period 1998 - 2002.

Prior to our review, there was no ongoing analysis of voluntary use of EFTPS designed to identify information that would aid in marketing EFTPS to the small business population. Therefore, we extracted payment data (payments made from January 1, 1997, to October 31, 1997) from the FAs' databases for all small business taxpayers who were not required to use EFTPS and whose payments were not made by a large service provider. We determined the geographical locations of voluntary users, the percentage of all taxpayers the voluntary users represent in their area, and the areas of the country where EFTPS has been more accepted. We provided ETA management with our analysis of these voluntary users.

The potential growth for small business taxpayers' use is great. Between January and October 1997, over 420,000 EFTPS payments were made by over 49,000 small business taxpayers not required to use EFTPS. This represented less than one percent of all paper and magnetic tape business payments.

- Appendix IV, Figure A, identifies the top ten geographic areas where small business taxpayers voluntarily used EFTPS.
- Appendix IV, Figure B, illustrates the percentage, by county, of the total number of small business taxpayers who voluntarily used EFTPS to the total number of small business 1996 Employer's Quarterly Federal Tax Returns (Form 941) filed with less than \$50,000 annual tax liability. Form 941 lists all the FTD payments made that quarter. We computed the percentages by comparing the number of taxpayers in each county who voluntarily made EFTPS Form 941 payments to the number in each county who filed a Form 941 in 1996 but were not required to use EFTPS.

#### Recommendation

- 4. ETA management and its marketing partners should:
  - a. Analyze small business voluntary EFTPS use to identify common factors which might explain the taxpayers' willingness to use EFTPS.
  - b. Based on this analysis, develop and implement marketing and communication strategies directed towards the potential voluntary user populations.

#### Management's Response:

IRS, FMS, and the FAs initiated discussions to identify ways to increase voluntary EFTPS enrollment and use. ETA management provided the FAs with a copy of our analysis of the demographic material. ETA also requested the development of a business taxpayer database to identify common factors for the current required users and the voluntary users of the system. They plan to use this database to develop additional marketing and communication strategies directed towards the potential voluntary user of EFTPS.

#### Conclusion

IS management corrected weaknesses reported in prior audits, including revising and retesting the EFTPS Business Resumption Plan and scheduling computer programming changes. Our review identified issues that IRS management should address to ensure the continued effectiveness of EFTPS and to increase voluntary use of EFTPS, including:

- Broadening efforts to ensure EFTPS processing capacity is sufficient to handle the anticipated growth in electronic payments in the future.
- Establishing a procedure to monitor the FAs' planned corrective actions on reported problems.

• Analyzing voluntary use of EFTPS and basing small business marketing and communication efforts on the results.

#### Appendix I

#### **Detailed Objectives, Scope, and Methodology**

The overall objective was to determine whether Internal Revenue Service (IRS) management took effective corrective action on selected, previously reported control and processing weaknesses, and developed an effective strategy to increase voluntary Electronic Federal Tax Payment System (EFTPS) use. In addition, we evaluated procedures for ensuring that EFTPS problems reported by the two EFTPS Financial Agents (FA) were resolved properly. To accomplish the objectives, we:

- I. Determined whether IRS management actions on selected, previously reported security and processing weaknesses effectively tightened controls over the system, taxpayer information, and accounting data.
  - A. Determined if procedures are in place requiring all simultaneous changes to taxpayers' Name Control and Taxpayer Identification Number to be flagged for 100 percent review.
  - B. Evaluated Information Systems (IS) management plans to update, finalize, and retest the EFTPS Business Resumption Plan for disaster recovery.
- II. Determined whether IS management has made sufficient progress towards determining the long-term risk of lost or delayed production on the existing system due to present capacity limitations.
  - A. Reviewed IS management's evaluation of EFTPS to ensure it included critical activities, including determining whether and how to upgrade the system to meet user requirements and redesigning existing software to address previous concerns.
  - B. Reviewed IS management's plans for prioritizing, developing, testing and implementing EFTPS Phase 3.0 and subsequent design upgrades.
- III. Determined whether IRS Office of Electronic Tax Administration (ETA) management has developed an effective strategy to significantly increase EFTPS volumes beyond the mandated business taxpayer population and reduce paper Federal Tax Deposit (FTD) volumes.
  - A. Evaluated ETA management plans to encourage increased voluntary EFTPS use, which would convert paper FTD coupons and estimated income tax payment vouchers to electronic payment transactions.

- B. Analyzed business taxpayer payment data provided by the FAs and Employer's Quarterly Federal Tax Return (Form 941) data extracted from the IRS taxpayer account files. The FAs provided payment data for business taxpayers not required to use EFTPS and who enrolled individually, not by a payroll tax service provider. The tax return data included all business taxpayers that filed at least one Form 941 for 1996 tax periods. We selected all taxpayers with total employment taxes less than \$50,000 (the threshold amount for mandatory use of EFTPS). We analyzed the selected EFTPS payments and Form 941 return filers to determine their zip codes. Using computer software, we mapped the EFTPS users' locations. We compared the number of users to the number of selected filers in each zip code and mapped the resulting percentages.
- IV. Determined whether IRS management had ensured that the FAs implemented appropriate corrective actions on reported incidents.
  - A. Reviewed incident reports and associated documentation submitted by the FAs between August 1997 and June 1998, to determine the nature of the problems and whether the FAs identified and corrected the cause.
  - B. Determined what assurance the FAs gave IRS and Financial Management Service management that the corrective actions were approved and completed.

#### **Appendix II**

#### **Major Contributors to This Report**

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#### **Appendix III**

#### **Report Distribution List**

Deputy Commissioner for Operations C:DO

Deputy Commissioner for Modernization C:DM

Chief Operations Officer OP

Chief Information Officer IS

Deputy Chief Information Officer (Systems) IS

Deputy Chief Information Officer (Operations) IS

Assistant Commissioner (Electronic Tax Administration) OP:ETA

National Director, Electronic Program Enhancement OP:ETA:E

National Director, Electronic Program Operations OP:ETA:O

Assistant Commissioner (National Operations) IS:O

Assistant Commissioner (Systems Development) IS:S

Acting Director, Tennessee Computing Center IS:O:T

Director, Submission Processing Division IS:S:S

Director, Memphis Service Center D

National Director for Legislative Affairs CL:LA

Office of Management Controls M:CFO:A:M

Assistant Commissioner (Program Evaluation and Risk Analysis) M:OP

Audit Liaison OP:ETA

Audit Liaison IS:I

#### **Appendix IV**

### Voluntary Use of the Electronic Federal Tax Payment System (EFTPS) by Small Business Employers

#### Figure A

### The top 10 geographic areas where small business taxpayers voluntarily used EFTPS

METROPOLITAN AREA	<b>BUSINESS TAXPAYERS USING EFTPS</b>
New York, NY	2,530
Chicago, IL	1,956
Los Angeles, CA	1,861
San Francisco/Oakland/San Jose,	1,384
Minneapolis/St. Paul, MN	939
Dallas/Ft. Worth, TX	933
Boston, MA	913
Houston, TX	669
Denver, CO	634
Honolulu, HI	476



Appendix V

#### **Management's Response to Draft Report**



DEPARTMENT OF THE TREASURY INTERNAL REVENUE SERVICE WASHINGTON, D.C. 20224 **JEIVED** 

January 13, 1999

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MEMORANDUM FOR ASSISTANT CHIEF INSPECTOR (INTERNAL AUDIT)

THRU:

John M. Dalrymple

Chief Operations Officer

FROM:

Robert E. Barr Voles Ja /2

Assistant Commissioner (Electronic Tax Administration)

SUBJECT:

Post Implementation Review of the Electronic Federal Tax

Payment System (EFTPS)

This is in response to your memorandum of September 30, 1998, regarding recommendations made concerning post implementation review of EFTPS. We have coordinated the response to this draft report with the Chief Information Officer (CIO).

#### Recommendation #1:

- Management should document overall and peak volume estimates and timelines for each payment option to project expected volume growth.
  - a. Business process owners should immediately develop these estimates for all productions and in-development applications and develop estimates for future applications as early as possible in the requirements development process. Management should also develop a process to ensure these estimates are updated as actual accomplishments dictate.
  - Information Systems management should consolidate these estimates to determine long-term expected processing volumes and peaks.

#### **Assessment of Cause:**

- a. Business process owners have not developed peak volume estimates for new initiatives that are needed to ensure management can plan an efficient system design and sufficient processing capacity.
- b. Even without considering new payment initiatives, the current system performs below a level that will ensure timely processing in the longterm.

#### Corrective Actions:

- a. Electronic Tax Administration (ETA) will develop peak volume estimates for new initiatives that are needed to ensure management can plan an efficient system design and sufficient processing capacity including evaluating the following factors:
  - Impact of the implementation of the avoidance penalty currently scheduled to be effective July 1, 1999.
  - Impact of the implementation of the e-file ACH Debit and Credit Card programs scheduled to be implemented effective January 1, 1999.
     Anticipated peak processing day will be April 15, 1999.
  - Memphis Service Center Daily EFTPS Processing Measures report thi
    report provides daily processing volumes by payment type.
  - 4. Required Electronic Federal Tax Payment System Usage Report this report will provide data related to number of payments made by required taxpayers. This information will assist in estimating system usage by required taxpayers and will be available on a quarterly basis.
- ETA will consolidate these estimates to determine long-term expected processing volumes and peaks.

#### Implementation Date:

Proposed: January 1, 2000.

b. Proposed: January 1, 2000.

#### Responsible Official:

Assistant Commissioner (Electronic Tax Administration)

#### Recommendation #2:

Management should take the following additional actions to ensure EFTPS processing capacity is sufficient to meet future needs.

- a. Supplement the improved processing design with operating plan alternatives that utilize Tennessee Computing Center and Atlanta Service Center system and Memphis Service Center Accounting capabilities to ensure peak day payment volumes are processed within the appropriate processing cycle.
- Complete the ongoing engineering analysis and implement the recommended design and architecture changes when increased volumes dictate.

#### Assessment of Cause:

- Alternate operating plans could further postpone the processing capacity shortfall risk without significant additional investment.
- b. The current system was sized to process the expected volume of Federal Tax Deposits (FTD). While FTDs should be expected to remain the largest segment of EFTPS use, planned new applications and marketing efforts could add significant processing volumes. Estimates of overall and peak volumes, accompanying long-term goals and growth, are needed from the business process owners as input for completion of the engineering analysis, to ensure management can plan an efficient system design and sufficient processing capacity.

#### Corrective Actions:

- a. To ensure peak day payment volumes are processed within the appropriate processing day, ETA has reviewed the alternatives and the resulting impact to processing. ETA has considered historical peak day volumes, updating Masterfile cycles and the current peak processing capacity of at least three million transactions per day and determined the optimum alternative to be extending a processing day's completion into the next day. Usually peak volume days have been followed by below average days.
- b. EFTPS developers have redesigned the internal applications to improve current processing time in Version 4.0 scheduled for implementation January 1999. This improvement will bring the peak processing capacity to at least three million transactions per day and should support the business needs in the short-term. This effort was based on a Capacity Assessment Recommendation. There will be continued analysis and monitoring of the EFTPS production system until the long-term requirements are defined.

An engineering analysis will be initiated once peak volumes estimates, including new EFTPS initiatives such as credit card and Electronic Funds Transfer payments associated with Electronic Filing balance due returns, are developed. These peak day volumes will not be available until the summer of 1999 or later.

The completion of the Engineering Analysis is dependent upon receipt of the peak volume estimates for the long-term processing needs of EFTPS. Since we are unable to provide us with the estimates at this time, we are not providing a corrective action or proposed completion date.

We propose that this recommendation be tabled until the next phase of the audit, at which time, we will determine whether the estimates that are necessary to conduct the engineering analysis are available.

#### Implementation Date:

a. Proposed: January 1, 1999.

b. Completed: N/A.

#### Responsible Official:

- a. Assistant Commissioner (Electronic Tax Administration)
- b. Chief Information Officer (CIO)
   Deputy Chief Information Officer (DCIO) for Systems IS:S

#### Recommendation #3:

- IRS management should recommend, through the Requirements Change Notice process, improved incident report procedures.
  - a. The Financial Agents (FA) should provide the Internal Revenue Service and the Financial Management Service management documentation of their resolution of report incidents, including evidence that computer programming changes are properly documented, tested, and approved before implementation.
  - IRS management should include, in the current oversight process, procedures to monitor FA proposed corrective actions and follow-up with the FAs on incomplete actions and recurring problems.

#### Assessment of Cause:

- IRS management's responsibility to taxpayers requires that they ensure that the FAs' systems will reliably, timely, and accurately process payments.
- Management does not have a continuous process to ensure changes related to reported incidents are appropriate and timely.

#### Corrective Actions:

- a. ETA will prepare a Requirement Change Notice to require the FAs to provide IRS and FMS all program transmittals related to resolution of reported incidents.
- b. The FAs use Incident Reports to report problems as they occur. These reports are provided to the IRS and FMS. Currently, both FAs provide monthly status reports related to actions taken to resolve the problems and causes of any reported incidents. These reports are presented at the monthly Production Meetings.

The FAs also provide monthly Quality Measures Reports. These reports include information related to the number and duration of Critical and Non-Critical System Outages and the number of abandoned customer service calls.

The IRS will continue to monitor all reports to identify any trends and the actions taken to resolve incidents.

#### Implementation Date:

a. Proposed: January 1,1999

b. Proposed: Ongoing

#### Responsible Official:

Assistant Commissioner (Electronic Tax Administration)

#### Recommendation #4:

- 4. Management and its marketing partners should:
  - Analyze small business voluntary EFTPS use to identify common factors which might explain the taxpayers willingness to use EFTPS.

 Based on this analysis, develop and implement marketing and communication strategies directed towards the potential voluntary user populations.

#### Assessment of Cause:

- There is no ongoing analysis of voluntary users designed to identify information that would aid marketing to the small business populations.
- Analysis indicated that the potential growth for small business taxpayers' use is very significant.

#### Corrective Actions:

a. The IRS and FMS have concentrated enrollment efforts at required taxpayers. Current statistics show that approximately 92 percent of the 1997, 1998, and 1999 required taxpayers have enrolled in EFTPS. Due to this successful effort, the IRS, FMS, and FAs have initiated discussions to increase voluntary enrollment and use. The IRS has provided the FAs the demographic material provided in the draft Internal Audit report and requested their increase involvement in marketing efforts toward voluntary enrollment and use.

ETA has also considered the development of a Business Masterfile (BMF) database that will used to identify BMF enrollments, required and voluntary, potential voluntary enrollments, and system usage, required and voluntary. We have requested that the database identify system usage by tax type and dollars paid; this information can also be used to identify common factors for current users of the system.

b. For the period October 4, 1997, through December 5, 1998, voluntary enrollment increased from 452,286 to 690,516. This represents a 65 percent increase in enrollments. Even though present activities have targeted required taxpayers; all materials have included outreach to increase voluntary enrollment, such as paid advertisements and seminars. The voluntary base continues to increase. The development of an ETA BMF database will allow for implementation of additional marketing and communication strategies directed toward the potential voluntary user population.

#### implementation Date:

a. Proposed: September 1, 1999.

b. Proposed: September 1, 1999.

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#### Responsible Official:

Assistant Commissioner (Electronic Tax Administration)

If you have any questions, please call me at (202) 622-7990.



#### DEPARTMENT OF THE TREASURY INTERNAL REVENUE SERVICE WASHINGTON, D.C. 20224

MEMORANDUM FOR TREASURY INSPECTOR GENERAL FOR TAX ADMINISTRATION

FROM:

Cor David W. Junkins

Director, Office of Information Resources Management IS:IR

SUBJECT:

Amended Management Response to Draft Internal Audit Report

- Post Implementation Review of the Electronic Federal Tax

Payment System (EFTPS)

The Assistant Commissioner for Systems Development (IS:S) has reviewed the Draft Internal Audit Report - Post Implementation Review of the Electronic Federal Tax Payment System (EFTPS) and is providing the attached revised management response.

If you have any questions, please call me on (202) 283-4060 or have a member of your staff call Donna Downing on (202) 283-4159.

#### Attachment

cc: Regional Inspector General for Audit - Southeast Region

#### Attachment

Amended Management Response to Draft Internal Audit Report - Post Implementation Review of the Electronic Federal Tax Payment System (EFTPS)

#### **RECOMMENDATION #2b**

- Management should take the following additional actions to ensure EFTPS processing capability is sufficient to meet future needs:
- Complete the ongoing engineering analysis and implement the recommended design and architecture changes when increased volumes dictate.

#### ASSESSMENT OF CAUSE

The current system was sized to process the expected volume of Federal Tax Deposits (FTDs). While FTDs should be expected to remain the largest segment of EFTPS use, planned new applications and marketing efforts could add significant processing volumes. Estimates of overall and peak volumes, accompanying long-term goals and growth, are needed from the business process owners as input for completion of the engineering analysis, to ensure management can plan an efficient system design and sufficient processing capacity.

#### AMENDED CORRECTIVE ACTION #2b

EFTPS developers redesigned the Tape-Edit Process (TEP) application to drastically improve processing times in EFTPS Version 4.0, implemented January 1, 1999. The redesign was recommended by the Capacity Management Branch in the Systems Support Division (IS:S:TS:CM), in their EFTPS Capacity and Performance Study Report, dated July 20, 1998. This improvement brought the peak processing capacity to at least three million transactions per day, and should support the business needs for the foreseeable future.

Performance monitoring of the EFTPS production system at the Tennessee Computing Center (TCC) is ongoing, and will continue throughout the Year 1999, by way of an automated data collection agent. Peak volume estimates are expected to be provided by the business process owner in January 2000. IS:S:TS:CM will model and analyze these peak volume estimates, along with collected system data, to provide a formal written assessment of EFTPS processing, including recommendations.

#### Attachment

Amended Management Response to Draft Internal Audit Report - Post Implementation Review of the Electronic Federal Tax Payment System (EFTPS)

#### AMENDED IMPLEMENTATION DATE FOR CORRECTIVE ACTION #25

PROPOSED:

July 3, 2000

#### **RESPONSIBLE OFFICIAL FOR CORRECTIVE ACTION #2**b

Chief Information Officer IS
Deputy Chief Information Officer (Systems) IS
Assistant Commissioner for Systems Development IS:S